WHAT IS CLAIMED IS:

1. A cable modem for connecting Customer Premises Equipment (CPE) comprising

a Media Access Control (MAC) layer controller;

a Logical Link Control (LLC) bridge interacting with the MAC layer controller;

an IP stack processing IP frames and interacting with the LLC bridge;

CPE interfaces, each interface linked to one device of Customer Premises Equipment; and

a multiplexer of Customer Premises Equipment (CPE) interfaces linked to the CPE interfaces and to the LLC bridge wherein the multiplexer has

a table of the CPE interfaces linked to the multiplexer with data related to the CPE interfaces, the data being used by an identification function to determine an addressed interface chosen from the CPE interfaces, to which a frame with a specific receiver physical address is directed, and

a table with MAC addresses of devices of the CPE and identifiers of the CPE interfaces to which of the devices of the CPE are linked, where an interface identifier, to which device of the CPE with a specific MAC address is connected, is determined by a check-and-associate function, and records to the table with MAC adresses are added using an adding function, which analyses commands sent by the interfaces

wherein the multiplexer enables transfer of data between the LLC bridge and one of the CPE interfaces.

2. The cable modem according to claim 1, wherein each of the CPE interfaces

is an interface of a physical CPE and controls flow of data between the multiplexer and a CPE driver.

3. The cable modem according to claim 1, wherein each of the CPE interfaces is an interface of a virtual CPE being an application and operates dependent on received frames and controls flow of data between the multiplexer and the application.

4. The cable modem according to claim 1, wherein the table of the CPE interfaces comprises a name of the device of the CPE, an ID number of the device of the CPE and a MAC address of the device of the CPE.

5. A method for controlling flow of data between a cable modem and CPE linked to the cable modem equipped with a multiplexer of CPE interfaces comprising

providing the multiplexer of interfaces with a table of interfaces comprising data enabling identification of the interfaces; and

using the table data by an identifying function to determine the interface identifier, to which a frame with a specific receiver MAC address is to be transmitted.

6. The method for controlling flow of data according to claim 5 further comprising

transmitting outgoing data from the cable modem through the CPE interface to an output buffer;

checking if the data is directed to another interface;

sending the data to a previously-reserved input buffer when the data is directed to another interface

canceling the reservation when the data is received from the input buffer by all recipients, to which it was directed; and

sending information to the LLC bridge about a frame in an output buffer directed to the LLC bridge.

7. The method for controlling flow of data according to claim 5 further comprising

transmitting the incoming data through the LLC bridge to a previously reserved input buffer; and

canceling the reservation of the previously reserved input buffer when the data is received form the input buffer by all recipients, to which it was directed.

8. The method for controlling flow of data according to claim 5 further comprising

controlling the input buffer by creating a list of recipients to which a frame is directed;

informing the recipients about the frame in the buffer;

increasing by one a counter of informed recipients for each informed recipient;

increasing by one a counter frame receipts when recipients receive a frame from the buffer; and

determining that the data is received by all recipients when the counter of

received frames reaches the counter of informed recipients.